



ONLINE TEACHING- LEARNING PRACTICES DURING PANDEMIC: A PERCEPTION OF STUDENTS AND TEACHERS OF B. ED PROGRAMME

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ABSTRACT

The COVID-19 pandemic caused several difficulties for schools, colleges, and universities. Around the world, continuing education is fraught with problems and difficulties for governmental institutions. In addition, they had persistent problems that had an impact on their day-to-day operations during this crisis, such as changes to daily routines, travel limitations, and other problems. Teachers quickly and abruptly embraced digital learning for the teaching-learning process. Online instruction has taken the place of in-person instruction. The present paper focuses on the perception of teachers and students towards online teaching learning activities at the time of Covid pandemic. The researcher had developed a Likert Scale and structured interview questionnaire to explore the perception of teacher educators and students on online teaching learning practices during Covid-19 pandemic. Two five-point Likert Scales (one for teacher educators and one for students) were developed consisting of 12 items each. These tools were sent through Google forms in B. Ed Colleges of GGSIPU in which 202 students and 30 teachers had responded about their perception regarding online teaching learning practices. The responses of teachers' interview and Likert scale perception is found to be aligned to each other. The teachers have mentioned in interview that they found traditional teaching is better than online teaching which also received high mean average in perception scale. The perception of students was bended towards involving hybrid/blended learning mode in classroom so that they can experience positive features of both online and traditional learning practices.

KEYWORDS: B. Ed. Programme, Covid-19, Online, Perception, Teaching-Learning.

INTRODUCTION

As a result of the COVID-19 pandemic educational institutions across the world faced various challenges. Government authorities across the world face many issues and challenges in continuing education. They also faced issues like daily routine changes, travel restrictions, and other ongoing issues that affected their day-to-day operations during this crisis. Teachers adopted digital learning for the teaching-learning process abruptly and rapidly. Face-to-face instruction was replaced by online instruction. In order to provide education amidst the sudden outbreak of COVID-19, the Ministry of Education launched a number of initiatives like the Alternative Academic Calendar (AAC), Pragyata Guidelines, DIKSHA (Digital Infrastructure for Knowledge Sharing), NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement), Learning Enhancement Guidelines, Vidyadaan portal for crowd sourcing of e-content, Guidelines for Children of Migrant Labourers, Manodharan programme, CBSE Shiksha Vani (Podcast) etc. E-learning resources were made available through different online platforms like e-PathShala, DIKSHA and NROER. In the pandemic, TV, Radio, and Podcasts were the major remote technologies for reaching maximum students where internet connectivity was not possible. Under the Swayam Prabha DTH TV programme, 34 channels were dedicated to telecast high quality educational content with the support of NCERT and other stakeholders.

Sharma (2021) studied Digital initiatives undertaken by state governments and central governments for continuing education during pandemic. The study highlighted the importance of e-learning and various digital platforms during lockdown as well as gaps in availability of resources, internet connectivity and digital equipment to students. It has been acknowledged that a blended mode of learning will help in filling the gaps in post-COVID times. Kar (2020) investigated the attitude of secondary school teachers towards online teaching learning during lockdown. The study was a descriptive cross-sectional study and results revealed that the school teachers had not shown a satisfactory attitude towards online teaching learning. The results also showed that the attitude of male teachers found to be more favourable than female teachers. It was also found that perception of female teachers found to be more positive towards the e-learning in comparison to male teachers. Mounjid et al (2021) evaluated the impact and effectiveness of online teaching learning during the pandemic outbreak among teachers in Morocco. An online survey was conducted to collect data from the teachers residing in different parts of Morocco. The results revealed that most of the teachers faced various challenges such as handling technology, lack of training and other socio-economic issues during the process of online education. Mukhter and Chowdhary (2020) found that during lockdown, online education became soul solution in the field of teaching learning. The students as well as teachers faced many challenges. This study also used and analysed the content of open discussions in webinars organized by the National Association of Social Workers in India (NAPSWI) regarding online learning and their experiences. Hermansyah and Aridah (2021) examined perception of the teachers and evaluated the challenges in the implementation of online learning in teaching English subjects. The study concluded that the selected English teachers were unfamiliar with online teaching learning initially and faced barriers in the teaching process. There are several obstacles such as the use of applications or platforms such as

use of media, knowledge of teachers, class scheduling, teacher and student motivation and plagiarism etc. that needs to be overcome in online setup. Thakur (2021) found that the COVID-19 pandemic has caused a major upheaval in the lifestyles of everyday people, especially students, necessitating a shift from traditional teaching methods to online learning. Online instruction has been a crucial aid in continuing courses amidst this crisis, and thus it is critical for educators to ascertain students' perception and make sure they are satisfied with the online classes.

Objective of the Study

The main objective of the present study was to explore the perception of teacher educators and students towards online teaching -learning practices in B. Ed. program during Pandemic.

Methodology of the study

The present study is descriptive in nature. The researcher had developed a five-point Likert Scales (one for teacher educators and one for students) consisting 12 items each and Semi-structured interview to explore the perception of teacher educators and students on online teaching learning practices during Covid-19 pandemic. These tools were sent through Google forms to B. Ed Colleges of GGSIPU in which 202 students and 30 teacher educators had responded about their perception regarding online teaching learning practices. The Interview tools for students and teachers were administered using Google meet platform. The reliability of the questionnaire (12 items) was found to be 0.798 on the Cronbach's Alpha Test conducted through SPSS which indicates a good reliability of the test. In the test, first two choices i.e., Strongly disagree and Disagree (1 and 2) were evaluated negatively whereas last two choices i.e., Agree and Strongly Agree (4 and 5) were evaluated positively. The perception of students was evaluated using percentage, arithmetic mean, and standard deviation of the data.

Analysis and Interpretation of the Self-developed Likert Scale

In total 202 students responded to the Likert scale that was administered through Google Forms. In the study, 91.58% students were Female and only 8.42% (Figure 1) of the students were Male. Further analysis of the Likert Scale was conducted through finding Mean, Standard Deviation and Percentage of responses on SPSS Platform. In Table 1, the responses of the students have been recorded in percentage form, whereas Table 2, represents the Mean and Standard Deviation analysis of all the items in the self-developed Likert Scale.

Statements	Responses in Percentage				
	SD	D	N	A	SA
I feel online learning is more effective than face to face learning	10.4	41.1	39.1	6.4	3.0
I enjoy online teaching learning activities during pandemic	5.9	24.8	38.6	25.7	5.0

I feel online learning is more effective than face to face learning	10.4	41.1	39.1	6.4	3.0
I enjoy online teaching learning activities during pandemic	5.9	24.8	38.6	25.7	5.0
I enjoy online learning because it enables me to learn at my own pace	4.0	13.9	32.2	42.6	7.4
I can easily access to online study material to clear my concept	8.9	17.8	19.3	38.6	15.3
I can learn at my comfortable surroundings during online class.	8.9	10.9	22.3	43.1	14.9
Online teaching learning activities makes me learn technical skills	10.4	8.4	19.3	41.6	20.3
I learn better in traditional setting of classrooms	9.4	13.9	27.7	32.2	16.8
I face lot of network issues during online learning	13.9	17.3	27.2	27.2	14.4
Online teaching learning cannot replace traditional teaching learning	10.4	13.4	22.8	32.2	21.3
I could use online teaching learning software's without any difficulties	7.9	17.3	32.2	31.7	10.9
I find it difficult to concentrate on the lecture during online class	14.4	17.3	28.2	30.7	9.4
I feel there was lack of training among teachers for online teaching	10.4	21.3	31.7	29.7	6.9

Table 1 reveals that most of the students had a positive attitude towards online learning, with relatively few respondents expressing strong disagreement with any of the statements. The highest percentage of "strongly agree" responses was for the statement "Online teaching learning activities makes me learn technical skills," which indicates that the students recognize the benefits of online learning in developing technical skills. The statement that received the highest percentage of "strongly disagree" responses was "I find it difficult to concentrate on the lecture during online class," suggesting that some students struggled with maintaining focus during online lectures.

Table 2 provides a more complex analysis of the responses by presenting mean and standard deviation values for each statement. The mean values indicate the overall level of agreement/disagreement with each statement, with a mean of 3 indicating a neutral response, while values above 3 indicate agreement and values below 3 indicate disagreement. The mean scores for each statement ranged from 2.50 to 3.53, indicating that the students held somewhat positive perceptions towards online teaching and learning. The statement with the highest mean score was "Online teaching learning activities make me learn technical skills," with a mean score of 3.53, indicating that students believed that online learning had helped them improve their technical skills.

N=202			
Statements	Mean	S. D.	
1. I feel online learning is more effective than face to face learning	2.50	0.877	
2. I enjoy online teaching learning activities during pandemic	2.99	0.972	
3. I enjoy online learning because it enables me to learn at my own pace	3.36	0.947	
4. I can easily access to online study material to clear my concept	3.34	1.195	
5. I can learn at my comfortable surroundings during online class.	3.44	1.141	
6. Online teaching learning activities makes me learn technical skills	3.53	1.206	
7. I learn better in traditional setting of classrooms	3.33	1.186	
8. I face lot of network issues during online learning	3.11	1.253	

9. Online teaching learning cannot replace traditional teaching learning	3.41	1.251
10. I could use online teaching learning software's without any difficulties	3.20	1.099
11. I find it difficult to concentrate on the lecture during online class	3.03	1.199
12. I feel there was lack of training among teachers for online teaching	3.01	1.099

Figure 2: Item-Wise Mean and S.D of Perception Scale of Students

The standard deviation values ranged from 0.877 to 1.253, indicating that there was some degree of variability in the responses. The higher standard deviation values for some statements, such as statement 8 ("I face a lot of network issues during online learning"), indicate that students had more diverse opinions and experiences with regards to that aspect of online learning. On the other hand, the statement with the lowest mean score was "I find it difficult to concentrate on the lecture during online class," with a mean score of 3.03, indicating that students faced some difficulties in focusing during online classes.

Overall, the responses suggest that there is a range of opinions among the participants regarding the effectiveness of online teaching-learning activities. While some participants find online learning convenient and effective for gaining technical skill, others faced network issues and difficulty concentrating during online classes. Additionally, some participants prefer traditional classroom learning and feel that online learning cannot replace it, while others feel that online learning is a viable alternative to traditional classroom learning.

Perception of Students through Interview

The perception of 30 students were recorded through Semi- Structured interviews. The tool comprised 7 questions which enabled the researcher to take holistic overview of their perception towards online teaching. The cumulative analysis of the responses with respect of different themes emerged from the responses are discussed below:

- How much helpful was online teaching during covid-19 pandemic?** - 100% of the 30 students agreed that online teaching activities were very beneficial during the time of the pandemic as no other alternative was available to continue their studies. 45% of the students had said that if online mode would have not been there then their career could have been negatively affected. The students also felt that online teaching created a positive environment and kept them motivated and busy during the time of crisis. So, 45% of the students believed that online teaching was helpful during the pandemic.
- How do you think online teaching - learning can serve benefits for the society in coming times?** -90% of students said that online teaching can make them technically skilled, can help in reducing the dropout number of students and can serve remote learners effectively. Whereas 10% said that online teaching alone cannot be helpful as it can negatively impact the health and mental wellbeing and emphasised over hybrid mode of learning.
- How much confidence do you feel while using such online software's?** - All the students agreed that after the online learning they feel very much confident around 50 to 90% in using basic online platforms such as Google Meet, zoom etc. and handling them. 15 % were found to be confident in using such online software's because of their previous expertise in dealing with online tools.
- Had you faced any issues during online teaching-learning process? If yes, please mention** - 85% students had mentioned identified various issues such as network connectivity, internet facilities, lack of peer interaction, lack of non-verbal communication such as gesture, postures and eye contact which helps to contact teacher educators and peers in a physical classroom. Lack of practical experience during the teaching internship and they had to deal with variety of issues such as ppt making, video recording, Hindi typing, time bounding activities etc. which made their online experience bit unpleasant.
- How challenging was connecting with online classroom in your perception?** - 85% students had mentioned identified various issues such as network connectivity, internet facilities, lack of peer interaction, lack of non-verbal communication such as gesture, postures and eye contact which helps to contact teacher educators and peers in a physical classroom. Lack of practical experience during the teaching internship and they had to deal with variety of issues such as ppt making, video recording, Hindi typing, time bounding activities etc. which made their online experience bit unpleasant.
- How comfortably you can use different devices (laptop, mobile etc) for online teaching learning process?** - 90% of the students agreed that they can access to online classroom across various devices such as laptop, mobile, tablet etc. They learned these devices during their internship which helped them in becoming comfortable in using such devices. Remaining 10% students felt that face to face mode would have been better instead of online teaching as they are not comfortable with online

equipment's.

7. What suggestions would you give for the improvement of online teaching learning? -50% students suggested that more extensive technical training of both teacher educators and students can be done to improve this method of teaching learning. Also, it was emphasised by 15% of students that the sessions can be made more interactive by using videos, audio, or more interactive online activities. 20% students suggested that in future to increase focus the students can be asked to switch on their cameras while in live classroom. Whereas remaining 15% had given suggestions such as enabling regular evaluations, attendance features and creating more engaging environment in online teaching learning mode. The analysis showed that online teaching-learning was perceived as beneficial during the Covid-19 pandemic, but there were also challenges and limitations. The students provided valuable suggestions for improving the online teaching-learning experience, such as technical training, interactive sessions, regular evaluations, and more engaging environments.

Perception of Teacher Educators through Likert Scale:

The Scale consisted 15 items in which three were related to the demographic information such as name, gender, and designation of teacher educators. Other questions consisted statements related to perception of teacher educators regarding online teaching learning activities. The reliability of the questionnaire (12 items) was found to be 0.798 on the Cronbach's Alpha Test conducted through SPSS which indicates a good reliability of the test. The demographic questions recorded the participation of 100% female teacher educators in the study. Further analysis of the Likert Scale was conducted through finding Mean, Standard Deviation and Percentage of responses on SPSS Platform. In Table 3, the responses of the teacher educators have been recorded in percentage form, whereas Table 4, represents the Mean and Standard Deviation analysis of all the items in the self-developed Likert Scale.

Statements	Responses in Percentage				
	SD	D	N	A	SA
I feel online teaching is beneficial for students	-	15	60	20	5
I think online teaching makes a positive impact on students	5	20	25	50	-
I was able to use online tools comfortably	-	20	15	55	10
I feel I can manage students effectively during online teaching.	-	20	35	40	5
I think that online teaching is not suitable for students.	10	30	25	20	15
There is always a problem of discipline in classroom during online teaching.	-	15	55	30	-
There are many software's that can prove to be beneficial in online teaching- learning	-	5	25	55	15
I faced lot of technical difficulties during online teaching learning	-	30	35	35	-
I feel face to face teaching is better than online teaching	-	10	20	30	40
I had faced a lot of networking issues during online teaching	5	30	25	35	5
Lack of proper training highly affects my online teaching competency	5	15	25	45	10
I did not get enough institutional support for online teaching learning.	20	25	15	30	10

Table 3: Item-Wise Percentage of Responses in Perception Scale of Teacher Educators

Table 3 represents that 60% of respondents chose the neutral option, indicating that they do not strongly agree or disagree with the statement that online teaching is beneficial for students. The highest percentage of respondents (50%) agree that online teaching makes a positive impact on students. 55% of respondents agree that they were able to use online tools comfortably. Statement 4 shows that the largest percentage of respondents (40%) agree that they can manage students effectively during online teaching. On statement 5, the largest percentage of respondents (30%) disagree that online teaching is suitable for students. Statement 6 shows that 55% of the respondents are neutral about the idea that there is

always a problem of discipline in the classroom during online teaching. For statement 7, 55% of respondents agree that there are many software tools that can prove to be beneficial in online teaching and learning. Statement 8 shows that 35% of respondents disagree that they faced a lot of technical difficulties during online teaching and learning. 40% of the respondents strongly agree with statement 9 that face-to-face teaching is better than online teaching. For statement 10, 35% agreed that they had faced a lot of networking issues during online teaching and learning. Statement 11 shows that 45% of the respondents agreed that the lack of proper training highly affects their online teaching competency. 25 % of the respondents disagreed that they did not receive enough institutional support for online teaching and learning. Overall, the percentage table shows a mixed perception of teacher educators towards online teaching and learning. While some respondents agree that it is beneficial and makes a positive impact on students, others have concerns about technical difficulties and the lack of institutional support.

N=30		
Statements	Mean	S. D.
I feel online teaching is beneficial for students	3.16	0.765
I think online teaching makes a positive impact on students	3.16	0.958
I was able to use online tools comfortably	3.53	0.964
I feel I can manage students effectively during online teaching.	3.26	0.872
I think that online teaching is not suitable for students.	3.00	1.291
There is always a problem of discipline in classroom during online teaching.	3.16	0.688
There are many software's that can prove to be beneficial in online teaching- learning	3.79	0.787
I faced lot of technical difficulties during online teaching learning	3.05	0.848
I feel face to face teaching is better than online teaching	4.05	1.026
I had faced a lot of networking issues during online teaching	3.05	1.079
Lack of proper training highly affects my online teaching competency	3.37	1.065
I did not get enough institutional support for online teaching learning.	2.95	1.311

Table 4: Item-Wise Mean and S.D of Perception Scale of Teacher Educators

In Table 4, the responses to the statements are generally positive, with mean values ranging from 2.95 to 4.05, indicating that the participants are generally in agreement that online teaching is beneficial for students, makes a positive impact on them, and that there are many software tools that can prove to be beneficial in online teaching-learning. However, there is also some disagreement, particularly for statement 5 ("I think that online teaching is not suitable for students") and statement 9 ("I feel face to face teaching is better than online teaching"). The standard deviations range from 0.688 to 1.311, which indicates that the responses of the participants varied to some degree for each statement. Overall, it appears in table 4 that the high perception areas are related to the benefits of online teaching and the respondents' ability to use technology effectively. Meanwhile, the low perception areas are related to challenges associated with online teaching, such as technical difficulties and the need for institutional support. These areas may require more attention and resources to address the challenges and improve the overall effectiveness of online teaching.

Perception of Teacher Educators through Interview:

The perception of teacher educators was also evaluated through a self-developed structured interview tool. In total 30 teacher educators participated while administering Semi-structured interview tool. The tool comprised 7 questions which enabled the researcher to take holistic overview of their perception towards online teaching. The analysis of the responses is as follows:

1. How challenging was connecting with online classroom in your perception? -At the start of online classes, teacher educators expressed that they faced challenges in connecting with the online classroom due to their lack of familiarity with technical devices and online platform features such as screen sharing, ppt designing, and communication in online mode. Additionally, they had not received any training, making it even more challenging. However, over time, they gradually overcame these difficulties and gained proficiency in handling the devices.

2. How much helpful was online teaching during covid-19 pandemic? -All the teacher educators acknowledged that online mode was very beneficial during the crisis. They believed that the online mode helped them stay connected with their students and prevented the loss of two academic years, which could have had negative impacts on their career growth.
3. Had you faced any issues during online teaching-learning process? If yes, please mention -85% of the teacher educators found online teaching less interactive and there were problems of lack of attention among students. 15% of the teacher educators also mentioned that there were problems of internet connectivity. One teacher educator discussed her experience with a student that "In her family she has two three siblings and one phone was available in the family, thus it was very difficult for her to attend classes through online mode." The problems of device availability and access to internet connection was there.
4. How do you think online teaching- learning can serve benefits for the society in coming times? -90% of the teacher educators mentioned that the online mode can prove to be beneficial for distant learners, physically disabled children, and learning-disabled children as it can help them to learn at their own comfortable surroundings and at their own pace. One of the teacher educators also mentioned that she had observed the increase in attendance on online mode because few students who cannot attend physical classrooms were able to connect on online mode. All the teacher educators agreed that online teaching learning can enable classroom functioning without time and space constraints.
5. How much confidence do you feel while using such online software's? -75% of the teacher educators reported experiencing a lack of confidence when initially using online software, but now they can use them with a feasibility rate of 60-70%. On the other hand, 25% of the teacher educators still encounter difficulties when using new software.
6. How comfortably you can use different devices (laptop, mobile etc) for online teaching learning process? -93.3% of the teacher educators agreed that they can access online classrooms across various devices such as laptop, mobile, and tablet, etc. The remaining 6.7% of the teacher educators felt that face-to-face mode would have been better instead of online teaching as they are not comfortable with online equipment.
7. What suggestions would you give for the improvement of online teaching learning? -The teacher educators acknowledged that online teaching has limitations and cannot completely substitute traditional teaching methods. However, they suggested that a hybrid model of teaching can have advantages. 01% of the teacher educators proposed conducting weekly seminars or workshops to benefit both teacher educators and students. 70% of the teacher educators emphasized the need for training students and teacher educators in effectively using online devices and making online learning more interactive. They believe this can improve the online learning system. The analysis showed that teacher educators perceived online teaching as a useful tool during the COVID-19 pandemic. However, they also highlighted some challenges, such as the lack of interaction and connectivity issues. Nonetheless, they suggested that with proper training, online teaching can be improved to benefit both teacher educators and students, particularly for distant learners and those with disabilities.

Discussions

In a study by Olayemi et. al. (2021) on students' perception and readiness towards e-learning during the pandemic, it was found that most respondents were knowledgeable and well-prepared for online learning. The study also revealed that respondents had a high level of ICT skills and competencies required for successful online learning. However, the study also identified significant challenges, including costly data, poor internet services, unreliable power supply, limited access to computers, and inaccessible online library resources that impede effective online learning. Similarly, Afroz et al. (2021) explored the attitudes of both students and teachers towards entirely online learning environments, they found that online learning had several benefits, including cost-effectiveness, time-efficiency, safety, ease-of-access, and greater involvement. However, they also identified several challenges, such as distractions, decreased attention, heavy workloads, technical and internet issues, inadequate network infrastructure, restricted availability of educational resources, poor attendance of students, uncooperative learners, and inadequate guidance from instructors and peers. Despite the challenges, teacher educators have suggested implementing a hybrid teaching model that combines the best parts of both traditional and online teaching practices. Students have also expressed an interest in using a hybrid or blended learning approach, allowing them to experience the positive features of both traditional and online learning. Overall, while teacher educators and students still prefer traditional teaching, they recognize the benefits of online learning and acknowledge its importance in the current educational landscape.

Conclusion

In the study, it is found that teacher educators have shown a positive response towards using of online tools but they also consider that physical interaction is highly needed in the professional degree courses. In overall perception of students, it was found that they think that face-to-face teaching is better than online teaching as it enables to make them learn better and enhance focus in the classroom which is not possible in online mode. It is also found that online teaching learning has made students more confident and comfortable with technical

devices and software's which they found difficult in handling initially. The perception of students was bended towards involving hybrid/blended learning mode in classroom so that they can experience positive features of both online and traditional learning practices. However, there is a need for ongoing support and training to ensure that all students and teacher educators have the necessary skills and access to technology to fully participate in online learning. Additionally, policymakers and education institutions must work together to address the challenges facing online learning and create an inclusive and equitable learning environment that meets the needs of all students.

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